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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,992	03/21/2002	Rodolfo Mann Pelz	10191/1969	8032
26646	7590	11/05/2003	EXAMINER	
KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004			WEST, JEFFREY R	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/913,992

Applicant(s)

PELZ ET AL.

Examiner

Jeffrey R. West

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to because they do not have sufficiently descriptive labels. Blank boxes in drawings should be labeled descriptively unless it is a well-known component.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed arrangements for new component detection, software error detection, etc. must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

Page 6, line 13 contains the confusing passage, "transmit a data stream, which is known as stream mode in English."

On page 7, line 28, "in certain time intervals" should be ---at certain time intervals---.

Art Unit: 2857

Page 8, line 30, contains the confusing passage, "the service element only have to be present in singlet."

Appropriate correction is required.

Claim Objections

4. Claims 14 and 15 are objected to because of the following informalities:

In claim 14, "a communication element and for" should be ---a communication element for---.

In claim 15, "a communications element and for," should be ---a communication element for,---.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 11-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 11 and 19 contain limitations for “equipping the other ones of the plurality of components”, however, the specification does not sufficiently enable one having ordinary skill in the art to make/use this aspect of the invention. The specification only mentions the “equipping” aspect in the claims and the abstract and fails to provide any further details on what it means to equip the component or how the component is equipped. For this reason, claims 11 and 19 are not enabled by the specification.

Claim 18 is rejected as lacking enablement because it includes a limitation for “checking newly loaded software in accordance with a predetermined value” while the specification fails to sufficiently describe this step to one having ordinary skill in the art or sufficiently define what comprises the “predetermined value”.

Claims 12-17 and 20 are rejected under 35 U.S.C. 112, first paragraph, because they incorporate the lack of enablement present in their respective parent claims.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11 and 19 are considered to be vague and indefinite because they recite, “an arrangement for configuring other ones of the plurality of components.” The

Art Unit: 2857

preamble of these claims recite "[a] service element that belongs to a distributed system as a component among a plurality of components of the distributed system that are independent of one another" and "a plurality of components connected by the bus and that are independent of each other, the plurality of components include a service element that includes," respectively. Neither of these preambles sufficiently define a group of components that would be interpreted as "other ones" of the plurality of components. Therefore, in the recitation of "other ones of the plurality of components" it is unclear to one having ordinary skill in the art to what the "other ones" refers. For this reason, rejection of claims 11 and 19 under 35 U.S.C. 112, second paragraph, is proper.

Claims 12-18 and 20 are rejected under 35 U.S.C. 112, second paragraph, because they incorporate the lack of clarity present in their respective parent claims.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 11, 12, 17, 19, and 20, as best understood, are rejected under 35

U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,185,491 to Gray et al.

Gray discloses a service element that belongs to a distributed system as a component among a plurality of components of the distributed system, including a communication element, that are independent of one another and interconnected by a bus (Figure 2) comprising an arrangement for configuring (i.e. selecting desired functions and settings) other ones of the plurality of components, an arrangement for equipping (i.e. activating) the other ones of the plurality of components, an arrangement for maintaining (i.e. maintaining operation at selected setting) the other ones of the plurality of components (column 5, lines 44-62 and Figure 9), and an arrangement for performing an emergency function (column 3, lines 52-54).

Gray discloses an arrangement for detecting a new component and for integrating the new component into the distributed system (column 6, lines 28-53) as well as an arrangement for operating a display device to represent information about a configuration (column 5, lines 60-64 and Figure 9) and transfer information about the distributed system to a user of the distributed system (column 6, lines 32-64).

Gray also discloses an arrangement including a communication element for loading new software interfaces for the plurality of components (column 4, line 65 to column 5, line 6 and column 6, lines 34-40 and 62-64).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 13, 14, and 18, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray in view of U.S. Patent No. 6,246,935 to Buckley.

As noted above, the invention of Gray teaches all of the features of the claimed invention except for including an arrangement for performing an error diagnosis of software running on the components, in accordance with a predetermined value, and, in case of an error, correcting the software.

Buckley teaches a vehicle instrument panel computer interface and display including a central control node that communicates to a plurality of other components (column 2, lines 57-62 and column 3, lines 29-51) and performs an error diagnosis of software running on the plurality of components (column 8, lines 46-63). Buckley also teaches determining the occurrence of an error in the software using a cyclic redundancy check with a checksum value (column 7, lines 38-52 and column 9, lines 28-38) (see also FOLDOC Free On-Line Dictionary of Computing, "cyclic redundancy check"), memory check (column 9, lines 38-55) and newly downloaded software check (column 10, 27-33), and, upon the occurrence of an error, correcting the software to maintain correct operation (column 9, lines 36-37 and 41-42 and column 10, lines 27-33).

It would have been obvious to one having ordinary skill in the art to modify the invention of Gray to include an arrangement for performing an error diagnosis of

software running on the components, in accordance with a predetermined value, and, in case of an error, correcting the software, as taught by Buckley, because the combination would have provided a further method for determining when new updates are required, such as the updates disclosed by Gray, and, as suggested by Buckley, provided a method for determining whether the software of the devices are updated, complete, and correct thereby insuring correct operation of the distributed system (column 8, lines 46-65, column 9, lines 28-30 and column 10, lines 30-33).

13. Claims 15 and 16, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray in view of Buckley and further in view of U.S. Patent No. 6,330,499 to Chou et al.

As noted above, the invention of Gray and Buckley teaches all of the features of the claimed invention except for including an arrangement for allowing a remote diagnosis of the plurality of components of the distributed system and a communications element for, in the case of a serious functional error, contacting a service provider.

Chou teaches a system and method for vehicle diagnostics and health monitoring including an in-vehicle computing system (column 2, lines 55-63) connected to a plurality of elements on a bus (column 3, lines 33-37 and column 6, lines 55-56) and an arrangement for allowing a remote diagnosis of the system (column 3, lines 15-31) and a communications element for, in the case of a serious

Art Unit: 2857

functional error, contacting a service provider (column 5, lines 16-24 and column 7, lines 4-26).

It would have been obvious to one having ordinary skill in the art to modify the invention of Gray and Buckley to include an arrangement for allowing a remote diagnosis of the plurality of components of the distributed system and a communications element for, in the case of a serious functional error, contacting a service provider, as taught by Chou, because the combination would have provided a method for adhering to space constraints of the system while still providing detailed monitoring and diagnostic functions to insure correct system operation and, as suggested by Chou, aided the user of the system by providing trouble-shooting, diagnosis, tracking, and recommendations, as well as prevented serious consequences (column 1, lines 18-30) and provided emergency responses to an emergency condition, such as the condition indicated by the emergency arrangement of Gray (column 7, lines 22-26).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,588,123 to Loibl teaches a bus system including a data module connected to a plurality of elements.

U.S. Patent No. 5,835,873 to Darby et al. teaches a vehicle safety system with safety device controllers.

U.S. Patent No. 5,964,816 to Kincaid teaches an address communication method for a distributed architecture supplemental inflatable restraint system including a control module that tests the integrity of component software using a cyclic redundancy check.

U.S. Patent No. 4,597,052 to Matsuda teaches a digital control system with an error monitor operative upon starting system operation.

U.S. Patent No. 6,075,438 to Abe et al. teaches a communication network for vehicle control and diagnosis method thereof.

FOLDOC Free On-Line Dictionary of Computing, "cyclic redundancy check", teaches the definition of a "cyclic redundancy check" as a method wherein a number is "derived from, and stored or transmitted with, a block of data in order to detect corruption. By recalculating the CRC and comparing it to the value originally transmitted."


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. West whose telephone number is (703)308-1309. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (703)308-1677. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2857

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

jrw
October 30, 2003


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800